assurance work, but disenrollment by member characteristics has been incompletely characterized. This information is important in longitudinal outcomes research. **Aim:** To calculate member disenrollment across HMORN sites by age, gender, and selected disease states. **Methods:** Baseline membership cohorts were identified for 8 consecutive years (2000-2007) at 9 HMORN sites. Members were included in a baseline cohort year if they were enrolled for at least 305 days in that year. Disenrollment, defined as having fewer than 305 days of membership in a year, was assessed at 1, 3, and 5 years for each cohort. Members who died before the end of each assessment period were censored. Comorbidity was assigned based on ICD9 diagnosis code(s) for diabetes, asthma, heart failure, hypertension, hyperlipidemia or depression over a three-year period ending with the end of the cohort baseline year. SAS code was prepared at one site for distribution to other sites to run against VDW tables. **Results:** While overall disenrollment varied across the participating sites, within-site disenrollment changed little from year to year. In general, 1-year disenrollment rates varied from 7% to > 22%; 5-year disenrollment rates ranged from < 30% to > 60%. Using one site as an example, peak 1-year disenrollment was seen among the 20-29 year old age group; lowest rates were seen among those age 60 years and older. Similar patterns were seen at 5 year follow-up, although differences between highest and lowest rates were smaller. Disenrollment rates were slightly higher among males. Disenrollment among members with any one of the measured diseases was lower than among members without that condition. **Conclusions:** Disenrollment (and retention) rates vary by age and disease state and less so by gender. While overall disenrollment is useful for many purposes, rates by member characteristics can be essential while planning studies of specific populations.

Keywords: HMORN, Participant characteristics, Enrollment studies

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PS1-17:

Herpes Zoster in Children

Sheila Weinmann, PhD, MPH[1]; Colleen Chun, MD[1]; Karen Riedlinger, MPH, ASCP[1]; Michelle Roberts, MSN, FNP[1]; Mary Rix, RD[1]; Mona Marin-Nelson, MD[2]; Scott Schmid, PhD[2]

[1]Kaiser Permanente Northwest; [2]Centers for Disease Control and Prevention

Background and Aims: Vaccine-strain herpes zoster (HZ) is a potential adverse outcome of varicella vaccination. Data are needed on the incidence of and risk factors for vaccine-strain HZ among children <18 years of age. The Centers for Disease Control and Prevention (CDC) funded a study at Kaiser Permanente Northwest (KPNW) to determine the number and proportion of pediatric HZ cases caused by varicella vaccine, assess positive predictive value (PPV) of physician diagnosis of HZ, and compute incidence of vaccine and wild-type HZ in the KPNW population. **Methods:** We used electronic data to identify all pediatric medical office visits with a HZ diagnosis. During the visit, the provider collected a lesion specimen and completed a questionnaire. The study nurse called to interview the parent and, if no specimen was previously collected, schedule a home visit to obtain it. A follow-up questionnaire on severity and duration of HZ was returned four weeks after rash onset. Specimens were sent to the National Varicella-Zoster Virus (VZV) Laboratory at the CDC for PCR analysis to confirm presence of the virus and classify it as wild-type or vaccine-type. **Results:** From 5/2005 to 3/2009, we enrolled 308 subjects in the study. Two-hundred eighty-one (96%) had adequate lesion specimens for PCR analysis. We found VZV in 75% of adequate specimens; 69% were wild-type, while 9% were vaccine-type and 1% (2) were vaccine:wild-type recombination. Among vaccinated subjects, 69% had wild-type HZ. The PPV for provider diagnosis of 'definite HZ' was 83%: 85% for unvaccinated subjects and 76% for vaccinated subjects. Incidence rates for vaccine-strain and wild-type VZV in plan children age 0-17 will be presented. **Conclusions:** Vaccine-strain VZV was found in a minority of HZ cases in this age group. We observed recombination of vaccine-strain and wild-type viruses in two subjects. Provider diagnosis of HZ was good overall.

Keywords: Herpes zoster, Diagnosis of herpes zoster, Varicella vaccination

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PS1-22:

Premature Birth, Initial Hospital Length of Stay, and Costs

Mary Ann Blosky, MS, MHA[1]; Zhengmin Qian, MD, PhD[1]; G. Craig Wood, MS[1]; James Betoni, DO[1]; Libby Black, PharmD[2]; Andrea Wary, BS, RN, MS[1]; Harry Mateer, MD[1]; Walter Stewart, PhD, MPH[1]

[1]Geisinger Health System; [2]GlaxoSmithKline

Background: Preterm birth disparities with their associated geographic, socioeconomic status and race/ethnicity factors are among the most widely recognized and least understood phenomena in the study of reproductive health. Previous studies have focused on total cost; few studies have disaggregated total charges into their components for both the preterm infants and their mothers or compared such costs to full-term births. **Aim:** To quantify and disaggregate initial hospital charges among preterm infants and their mothers compared to full-term controls. **Methods:** The study populations were comprised of mother-infant dyads that included 746 preterm cases and 3372 controls. Data were obtained from the Geisinger outpatient electronic health record, Geisinger Medical Center billing records, and the inpatient pharmacy billing database in the Geisinger Health System. Measures were derived for hospital charges, lengths of stay for infants and mothers, and the mean delivery hospitalization charges for the subset of infants and mothers who had the most frequent diagnoses, procedures, and drug classes. **Results:** The mean hospitalization charges ($103,000 versus $7,000) and the length of stay (16.1 days versus 2.3 days) were substantially higher for preterm infants versus controls. Extreme preterm infants (< 26 weeks) accounted for 1.3% of the total preterm births and approximately 20% of the total initial hospital charges and near term infants (33-36 weeks) accounted for approximately 14% of total births and 30% of the total charges. The most frequent inpatient medical conditions were five to 17 times as frequent among preterm infants as among the controls. The most frequent procedures and drug classes were also generally more prevalent among preterm infants. Preterm infants had generally higher charges related to inpatient diagnoses, procedures and medication utilization. The mean hospitalization charges ($23,000 versus $15,000) and length of stay (i.e., 5.1 days versus 2.3 days) was also higher among the preterm mothers than controls. Medication utilization was compared between the two groups and preterm mothers had higher charges related to inpatient diagnoses, procedures and medication utilization compared to controls. **Conclusions:** The most extreme premature (4.3%) of preterm births accounted for 47% of the total preterm hospital charges. Overall costs increased as gestational ages decreased.

Keywords: Preterm birth disparities, Preterm hospitalization costs, Reproductive health

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PS1-23:

The Environmental Scan: A Valuable Community Health Research Tool

Virginia Scobba, MLS, MA; Group Health Cooperative

Background and Aims: The environmental scan (ES) focuses on the identification, collection, and translation of external information that may potentially influence an organization's decision making process. An ES allows an organization to address social, economic, political, and technical issues that may not be readily apparent and enables a comparative evaluation of the organization's internal strengths and weaknesses. Through understanding external elements and internal processes, the organization can respond in a more auspicious and productive manner. Health researchers are employing ESs to build on established knowledge with the goal of improving the design and effectiveness of community health programs. **Methods:** There is no one correct methodology for conducting an ES, but typically, ESs are characterized by several features. Initially, a broad spectrum of issues is examined, involving social, political, technological and other trends. Second, information may be gathered from a variety of sources, including literature reviews, surveys, interviews, focus groups, and site visits. Third, critical analysis and dissemination of collected data is promoted by the recruitment of experts from both inside and outside the fields being scanned. ESs can utilize a wide sweep of information sources, ranging from formal, established data, such as